

REMARKS

The above amendment and these remarks are responsive to the Office action of 2 Dec 2005 by Examiner Lalrinfamkim Hmar Malsawma.

Claims 1-6 are in the case, none as yet allowed.

35 U.S.C. 112

Claims 1-6 have been rejected under 35 U.S.C. 112, first paragraph.

The Examiner states that the previous amendment to the claim introduces new matter.

The Examiner is correct.

Upon further analysis, applicants have determined that how the capacitors are built is not an appropriate basis for differentiating their design from others.

ROC920030250US1

8

S/N 10/732,950

Applicants have amended claim 1 to remove the material to which the rejection is directed.

35 U.S.C. 103

Claims 1-6 have been rejected under 35 U.S.C. 103(a) over Suzuki, U.S. Patent 5,598,029.

With respect to the present application, applicants note that Suzuki is describing a layout which is significantly different from that described by applicants.

Applicants traverse the Examiner's conclusion that current flow would be limited by the inversion layer.

"Such a construction would obviously limit defect current because the inversion-layer region of the substrate would function as a 'defect-current limiter'..." [Office Action, page 4].

The point of the inversion layer is to allow the current to

ROC920030250US1

9

S/N 10/732,950

flow from the source to the drain in a typical transistor. In effect, it is a vehicle for current conduction! So, to say that the inversion layer limits the current flow is not correct - and in fact Suzuki states in the abstract that the parasitic resistance in the inversion layer is small.

Applicants also traverse the Examiner's conclusion that bandwidth limiting resistance $R/2$ is readily attributable to the Suzuki design. As applicants interpret Suzuki's design, down at the actual capacitor it is not connected any differently than a typical capacitor, and such connections do not achieve current limiting resistance of $R/2$.

In a typical capacitor layout, as in Suzuki, both ends of the polysilicon layer are contacted and the entire length of the diffusion is populated with contacts. In applicant's design, as is illustrated in Figure 8, only one end of the polysilicon layer 148 is contacted (at 146a) and the diffusion contacts 144a are placed only along the end of the capacitor opposite that of the contact polysilicon.

Applicants have amended claim 1 accordingly, and claims 2-6 are dependent upon and contain the limitations of claim 1.

ROC920030250US1

10

S/N 10/732,950

Applicants have further amended claim 2, and claims 3-6 which depend therefrom, to recite that current flows through a section of the diffusion and the substrate to the defect.

Applicants urge that claims 1-6 be allowed.

SUMMARY AND CONCLUSION

Applicants urge that the above amendments be entered and the case passed to issue with claims 1-6.

The Application is believed to be in condition for allowance and such action by the Examiner is urged. Should differences remain, however, which do not place one/more of the remaining claims in condition for allowance, the Examiner is requested to phone the undersigned at the number provided below for the purpose of providing constructive assistance and suggestions in accordance with M.P.E.P. Sections 707.02(j) and 707.03 in order that allowable claims can be presented, thereby placing the Application in condition for allowance without further proceedings being

ROC920030250US1

11

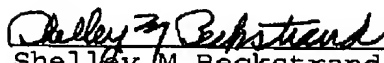
S/N 10/732,950

necessary.

Sincerely,

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By


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ROC920030250US1

12

S/N 10/732,950